

is not black, but is concolorous with the rest of the wing: the hind wing is brown, pale inwards, the costal space and a large triangular medial patch being whitish flesh-colour.

Expanse of wings $1\frac{2}{10}$ inch.

Padang, Sumatra; one example.

Pyrausta silvosalis, nov.

♂. Palpi and frons brown, the latter yellow at the tips; antennæ with short, white, minute, and evenly disposed cilia; head, body, and wings yellow: fore wings with the costa and outer margin purplish brown, with some paler shading inwards; two brown dots in a line in the cell, a spot at the end, a dot below the inner dot, and two dots on the hind wing below; a brown discal fine line across both wings, with a large outward curve above the middle on the fore wings and smaller similar curve in the middle on the hind wings, which has also a thick marginal dark brown line with some inner brown shading towards the apex; cilia of both wings pale yellow, with a brown line near the base.

Expanse of wings $\frac{8}{10}$ inch.

Khasia Hills; one example.

I know of no near ally; the markings resemble those of a *Pachyzancla*.

LX.—On *Myriolepis hibernica*, a *Palæoniscid* Fish from the Irish Coal-Measures. By A. SMITH WOODWARD, LL.D., F.R.S.

[Plate X.]

HAVING recently had occasion to study an undetermined species of the Palæoniscid fish *Myriolepis*, from the Hawkesbury Formation of New South Wales, I have been led to a renewed examination of the small form, *M. hibernica*, described by Dr. Traquair in 1893* from the Coal-Measures of Ireland. The latter species is now known by a nearly complete fish in anthracite from the Jarrow Colliery, Kilkenny, presented to the British Museum by John Gerrard, Esq.; and this specimen proves to be so much more valuable for comparison with the typical Australian fossils than any

* R. H. Traquair, "On a new Palæoniscid Fish, *Myriolepis hibernicus*, sp. nov., from the Coal-Measures, Co. Kilkenny, Ireland," *Geol. Mag.* [3] vol. x. (1893) pp. 54-56, pl. iii.

of the fragmentary examples described by Dr. Traquair and Mr. Bolton *, that it seems worthy of special description.

The new specimen is shown of the natural size in Pl. X., and indicates a fish originally about 18 cm. in length. It is therefore smaller than the examples previously discovered. It is exposed in direct side view, and is only distorted by the crushing of the head a little downwards and backwards upon the anterior part of the abdominal region.

An impression of part of the cranial roof proves that this must have been coarsely but closely tuberculated. A fragment of the dentary bone is ornamented with fine longitudinal ridges, and its oral border bears a few very large conical teeth which are suggestive of those of *Nematoptychius* and *Pygopterus*. Some indeterminable remains of coarsely tuberculated bones are also shown beneath the mandible.

The axial skeleton of the trunk is well calcified and seen through the thin squamation. There is a vacant space as usual denoting the position of the notochord, while there are no traces of ribs. The long neural spines of the abdominal region in advance of the dorsal fin are clearly separate from their supporting arches. The neural and hæmal arches in the caudal region are comparatively small and fused with their respective spines.

Among the crushed bones at the back of the head the vertically elongated supraclavicle, with rounded lower end, can be distinguished; and its outer face, which is traversed by the usual slime-canal, is ornamented with fine concentric ridges. The large elongate-triangular infraclavicles are similarly ornamented. The pectoral fin of one side is apparently complete and has a rounded shape, with the gently curved anterior border fringed by close-set minute fulcra. All its rays are stout and closely articulated to a point near the base, while all except the few foremost are finely divided distally. When adpressed to the trunk this fin reaches the origin of the pelvic pair, which arises slightly nearer to the origin of the pectorals than to that of the anal fin. The pelvic fins are almost as much elevated as the pectorals and have a similarly arched anterior border, but no fulcra can be seen here. The rays gradually increase in length to the longest, and some of them exhibit a fine longitudinal striation (fig. 1 *b*). The hinder rays are incomplete, and above their insertion, where some scales are displaced, there are a few markings which seem to be due to rod-shaped baseosts. Of

* H. Bolton, "Note on *Myriolepis hibernica*, Traq.," Trans. Manchester Geol. Soc. vol. xxii. (1894) pp. 1-4, pls. i., ii.

the dorsal fin only a fragment remains, but enough is preserved to show that it arises at least as far forwards as the pelvic fins. The anal fin is also incomplete, but there are some good impressions of the long axonosts and short baseosts which support it. The caudal fin is deeply forked and some of its stout rays are ornamented with delicate longitudinal striæ like those of the pelvic fin already mentioned.

The characteristically small scales covering the whole of the trunk are well indicated, but it is not clear whether those of the flank are deeper than broad. At some points near the dorsal and ventral borders of the fish the scales are clearly equilateral. The whole squamation is ornamented with delicate closely arranged ridges, which sometimes bifurcate, are sometimes subdivided into elongated tubercles, and are all disposed in an antero-posterior or horizontal direction (fig. 1a). The course of the lateral line is marked by a simple ridge. On the upper caudal lobe, which is broken away distally, the scales are relatively larger and oat-shaped; but they seem to be preserved only as impressions of the inner face.

Adding the new facts now discovered to those previously ascertained, *M. hibernica* may be briefly diagnosed as follows:—

A stout species attaining a length of about 30 cm. Length of head with opercular apparatus considerably less than the maximum depth of the trunk, and contained somewhat more than four times in the total length of the fish. Cranial roof coarsely tuberculated; mandible longitudinally striated; bones of pectoral arch concentrically striated. Pelvic fins nearly as large as the pectorals, which, when adpressed to the trunk, reach the former; dorsal fin arising opposite the origin of the pelvic pair; anal fin extending back almost as far as the caudal; fin-rays ornamented with fine longitudinal striations. Scales ornamented with close and delicate transverse ridges, which sometimes bifurcate and are sometimes subdivided into elongated tubercles.

There is still nothing to prevent this fish of the Irish Coal-Measures from being assigned to the same genus as the Australian Triassic and Permo-Carboniferous fishes, for which the name *Myriolepis* was originally proposed, although, as remarked by Dr. Traquair, the exact nature of the pectoral fin in the typical species remains unknown. The above specific diagnosis, however, readily distinguishes *M. hibernica*, which is remarkable for the stoutness and shortness of its abdominal region and for the forward position of the dorsal fin.

EXPLANATION OF PLATE X.

Fig. 1. *Myriolepis hibernica*, Traquair; left side view of fish, nat. size.—
Coal-Measures; Jarrow Colliery, Kilkenny, Ireland. [Brit. Mus.
no. P. 9604.]

Fig. 1 a. Scale-ornament of same specimen, five times nat. size.

Fig. 1 b. Fin-rays of same specimen, five times nat. size.

LXI.—*Brief Diagnoses of a new Genus and Ten new
Forms of Stenodermatous Bats.* By KNUD ANDERSEN.

THE subjoined diagnoses are preliminary only. A monograph of the genera *Uroderma*, *Enchisthenes*, and *Artibeus*, based on the material in the British Museum and the United States National Museum, is ready in manuscript and will be published elsewhere before long.

ENCHISTHENES*, gen. nov.

Allied to *Artibeus*, but median upper incisors simple (in *Artibeus* bifid); m^3 in row, *i. e.* situated directly behind m^2 , quite or very nearly as broad as the hinder margin of this latter molar (in *Artibeus* rudimentary and situated postero-internally to m^2 , or entirely wanting); m_3 comparatively large, equal to about $\frac{1}{4}$ of m_2 (in *Artibeus* equal to $\frac{1}{8}$ – $\frac{1}{2}$ of m_2 or entirely wanting). Tragus with a pointed, upwardly directed projection on the inner margin near the tip (no trace of a similar projection in any species of *Artibeus*).

Type.—*Artibeus Harti*, Thos.†; Trinidad.

Species.—The type of the genus is the only species known.

Uroderma Thomasi, sp. n.

Allied to *U. bilobatum*, Ptrs., but with noticeably larger skull, longer tooth-rows, and larger ears and nose-leaves.

Length of skull, in two specimens, frominion to front of canines, 24.7–24.8 mm. (of 22 skulls of *U. bilobatum*, from localities dotted over the whole area inhabited by the species, 22–23.3 mm.); maxillary tooth-row 8.9–9 mm. (7.8–8.5 mm.); length of ear-conch from base of outer margin 18–18.5 mm. (15.7–16.8 mm.); width of ear-conch 12.8–13.7 mm. (11–12 mm.); greatest width of lancet 6.2–6.5 mm. (4.8–5 mm.).

* 'Εγχεισθενής, armed with a spear (ἔγχος or ἔγχος, spear; σθένος, strength), in allusion to the form of the erect portion of the nose-leaf.

† Ann. & Mag. Nat. Hist. (6) x, pp. 409–410; Nov. 1892.